

State of Alaska - Air Permits Program
Owner Requested Limit Letter of Approval
DRAFT

STATIONARY SOURCE IDENTIFICATION:

No. AQ0293ORL02

Owner/Operator:	State of Alaska, Department of Transportation and Public Facilities
Stationary Source:	Fairbanks International Airport
Stationary Source Address:	6450 Airport Way, Suite 1
City, State, Zip:	Fairbanks, AK 99709
Location:	Latitude 64 ⁰ 48' 57" North / Longitude 147 ⁰ 51' 29" West
Stationary Source Contact:	Rebekah Cadigan
Phone Number:	(907) 474-2582
E-Mail Address:	Rebekah.cadigan@alaska.gov

The above-named owner/operator has submitted a complete application to revise a previously issued owner-requested limit (ORL) under 18 AAC 50.225(h) for the Fairbanks International Airport. The Department approves a revised ORL to restrict the stationary source allowable emissions and potential to emit. The Department certifies that the owner-requested limit is effective as of the date noted below.

In accordance with 18 AAC 50.225(f), the applicant has agreed to the conditions listed on the following pages.

The owner or operator may revise the terms or conditions of this approval under 18 AAC 50.225(h)(1) by submitting a new request under 18 AAC 50.225(b). The owner or operator may request the Department revoke the limit in accordance with 18 AAC 50.225(h)(2). This limit remains in effect until the Department approves a new limit or revokes it.

On the effective date noted below, ORL No. AQ0293ORL01 is rescinded.

I understand and agree to the terms and conditions of this approval.

DRAFT
Owner or Operator

DRAFT
Printed Name

Title: DRAFT

Department Approval:

DRAFT
John F. Kuterbach, Program Manager
Air Permits Program

DRAFT
Owner Requested Limit Effective Date

CONDITIONS:

Owner Requested Limit, Monitoring, Recordkeeping, and Reporting.

1. The owner/operator shall limit the sum of the diesel fuel and the diesel equivalent¹ of natural gas fuel consumption in the sources listed in Table 1 to no more than a cumulative total of 1,000,000 gallons in any 12-month period.
 - 1.1 Measure and record the quantity of diesel fuel burned in the sources listed in Table 1 at the facility monthly.
 - 1.2 Measure and record the quantity of natural gas burned in the sources listed in Table 1 at the facility monthly.
 - 1.3 Keep records of the quantity of diesel fuel burned in the sources listed in Table 1 by month.
 - 1.4 Keep records of the quantity of natural gas burned in the sources listed in Table 1 by month.
 - 1.5 Include in the report required by condition 8:
 - a. A listing of the total diesel fuel burned in the sources listed in Table 1 for the past 12 months, by calendar month;
 - b. A listing of the total natural gas burned in the sources listed in Table 1 for the past 12 months, by calendar month;
 - c. Calculate and report the total amount of diesel equivalent from the quantity of natural gas burned in the sources listed in Table 1 for the past 12 months, by calendar month, using the following equation:
$$\text{Gallons diesel} = \text{MMscf natural gas} \times 7194.2 \frac{\text{gal}}{\text{MMscf}}$$
 - d. Report the sum of the diesel fuel and the diesel equivalent of natural gas burned in the sources listed in Table 1 for the past 12 months, by month.
2. The owner/operator shall limit the operation of the Category III diesel generators listed in Table 2 to no more than a cumulative total of 900,000 horsepower-hours in any 12-month period.
 - 2.1 Measure the hours of operation of each diesel generator listed in Table 2 and calculate the horsepower-hours² on a monthly basis.
 - 2.2 Keep records of the horsepower-hours³ of operation of each diesel generator listed in Table 2 by calendar month.
 - 2.3 Include in the report required by condition 8 a listing of the total horsepower-hours of operation calculated under condition 2.1 for all diesel generators listed in Table 2 for the past 12 months, by calendar month.
3. The owner/operator shall limit the operation of the emergency diesel generators listed in Table 3 to no more than a cumulative total of 500,000 horsepower-hours in any 12-month period.

¹ Diesel equivalent: For the purposes of complying with this limit, 1 MMscf of natural gas is equivalent to 7,194.2 gallons of diesel fuel.

² Horsepower-hours of operation are calculated by multiplying the rated capacity of the generator by the hours of operation.

³ Calculate horsepower-hours of operation by multiplying the rated capacity of the generator by the monthly hours of operation.

- 3.1 Measure the hours of operation of each diesel generator listed in Table 3 and calculate the horsepower-hours on a monthly basis.
 - 3.2 Keep records of the horsepower-hours of operation of each diesel generator listed in Table 3 by calendar month.
 - 3.3 Include in the report required by condition 8 a listing of the total horsepower-hours of operation calculated under condition 3.1 for all diesel generators listed in Table 3 for the past 12 months, by calendar month.
4. The owner/operator shall limit the operation of the starved air incinerator listed in Table 4 to no more than a cumulative total of 20 tons of solid waste in any 12-month period.
 - 4.1 Measure and record the amount of solid waste burned in the source listed in Table 4 monthly.
 - 4.2 Keep records of the quantity of waste burned in the incinerator listed in Table 4 by month.
 - 4.3 Include in the report required by condition 8 a listing of the quantity of waste burned in the incinerator listed in Table 4 for the past 12 months, by calendar month.
5. The owner/operator shall limit the fuel consumption of the used oil burner listed in Table 5 to no more than a cumulative total of 8,000 gallons of used oil in any 12-month period.
 - 5.1 Measure and record the amount of used oil burned in the source listed in Table 5 monthly.
 - 5.2 Keep records of the quantity of used oil burned in the source listed in Table 5 by month.
 - 5.3 Include in the report required by condition 8 a listing of the quantity of used oil burned in the source listed in Table 5 for the past 12 months, by calendar month.
6. The owner/operator shall ensure that the fuel sulfur content of the liquid fuel burned at the facility does not exceed 0.50% by weight.
 - 6.1 If the fuel grade does not require a sulfur content less than 0.50%, test each shipment of liquid fuel for the percent sulfur by weight using an ASTM-approved method or obtain a record from the fuel supplier certifying that the fuel contains less than 0.50% sulfur.
 - 6.2 Keep copies of fuel delivery records that specify the grade of fuel used in liquid fuel fired sources. If the fuel grade does not require a sulfur content less than 0.50%, keep records of the sulfur content test results or vendor certification of sulfur content.
 - 6.3 Include in the report required by condition 8 a listing of the sulfur content, fuel sulfur testing results, or the fuel grade of each liquid fuel shipment.
7. **Recordkeeping Requirements.** The stationary source shall keep all records required by this ORL for at least five years from the date of collection.
8. **Annual Operating Reports.** Submit one copy and the original of an annual operating report for the stationary source to ADEC, Air Permits Program, 610 University Avenue, Fairbanks, AK 99709-3643 by February 1 for the preceding calendar year. Certify the report as specified in 18 AAC 50.205 by having the responsible official sign after the following statement, "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true,

accurate, and complete.” Attach copies of all excess emission and deviation forms submitted to ADEC during the reporting period. Clearly describe any deviations from limit requirements.

9. The owner/operator shall fax a notification to the Fairbanks Air Permit Program office, Attn: Compliance Technician, at (907) 451-2187 within 24 hours of discovery if:
 - 9.1 Fuel use for the sources listed in Table 1 exceeds 900,000 gallons of diesel fuel and equivalent amount of natural gas in any 12 month period; and/or
 - 9.2 The horsepower-hours of operation of the diesel generators listed in Table 2 exceeds 850,000 in any 12 month period; and/or
 - 9.3 The horsepower-hours of operation of the diesel generators listed in Table 3 exceeds 450,000 in any 12 month period; and/or
 - 9.4 The amount of waste burned in the incinerator listed in Table 4 exceeds 18 tons in any 12 month period; and/or
 - 9.5 The quantity of waste oil burned in the source listed in Table 5 exceeds 7,500 gallons in any 12 month period.
10. **Excess Emissions and Deviation Reports.** Report all emissions or operations that exceed or deviate from the requirements of this owner requested limit as follows:
 - 10.1 In accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report emissions that present a potential threat to human health or safety; and excess emissions believed to be unavoidable;
 - 10.2 Report all other excess emissions and deviations:
 - a. within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in condition 10.2b; and
 - b. if a continuous or recurring excess emission is not corrected within 48 hours of discovery, report within 72 hours of discovery unless ADEC provides written permission to report under condition 10.2a.
 - 10.3 When reporting excess emissions and deviations, use either ADEC’s on-line form, which is in Attachment A and at <http://www.dec.state.ak.us/air/ap/docs/eeform.pdf>, or provide all information called for by that form.
 - 10.4 If requested by ADEC, provide a more detailed written report as requested to follow up an excess emissions report.
 - 10.5 In the report required by condition 8, clearly identify any deviation from the limit requirements.

Statement of Avoided Requirement:

The potential to emit for the emission units listed in Table 1 plus insignificant emission units will be less than 100 tons per year for any regulated air contaminant under terms of this ORL. Consistent with the definition of “potential to emit” listed in AS 46.14.990(23), the capacity of the stationary source to emit an air contaminant is verifiable through the monitoring, record keeping, and reporting contained in this approval. By limiting the potential to emit of the emission units listed in Table 1, the owner/operator is avoiding the requirement to obtain an operating permit by avoiding classification of the stationary source under AS 46.14.130(b) and 18 AAC 50.326 (a).

Table 1 -- Emission Unit Inventory Subject to Fuel Usage Limit

ID	Unit Name	Unit Description	Fuel Type	Rating/Size
1	Boiler 1 of 2	ARFF Building Diesel Boiler	Diesel	2.4 MMBtu/hr
2	Boiler 2 of 2	ARFF Building Diesel Boiler	Diesel	2.4 MMBtu/hr
3	Boiler 1 of 2	Field Maintenance Building Diesel Boiler	Diesel	1.9 MMBtu/hr
4	Boiler 2 of 2	Field Maintenance Building Diesel Boiler	Diesel	1.9 MMBtu/hr
5	Boiler 1 of 1	Mobile Diesel Boiler	Diesel	1.5 MMBtu/hr
6	Boiler 1 of 3	Terminal A Natural Gas Boiler	Natural Gas	2.603 MMBtu/hr
7	Boiler 2 of 3	Terminal A Natural Gas Boiler	Natural Gas	2.603 MMBtu/hr
8	Boiler 3 of 3	Terminal A Natural Gas Boiler	Natural Gas	2.603 MMBtu/hr
9	Space Heaters (9)	Various Space Heaters	Diesel	2.14 MMBtu/hr total
10	Water Heaters (2)	AMF Water Heaters	Diesel	0.199 MMBtu/hr each
11	Furnaces (2)	Building 50 Furnaces	Natural Gas	0.3 MMBtu/hr each
12	Water Heaters (2)	Terminal A Water Heaters	Natural Gas	0.277 MMBtu/hr each

NOTE. Overall fuel consumption limit from the emission units in Table 1 is expressed in gallons of diesel. For units 6-8 and 11-12 the natural gas consumption is expressed as diesel equivalent using the conversion factor in condition 1.5c.

Table 2 -- Emission Unit Inventory Subject to Operation Limit

ID	Unit Name	Unit Description	Fuel Type	Rating/Size
13	Category III Generator	Regulator Building Generator	Diesel	416 hp
14	Category III Generator	Regulator Building Generator	Diesel	490 hp

Table 3 -- Emission Unit Inventory Subject to Operation Limit

ID	Unit Name	Unit Description	Fuel Type	Rating/Size
15	Emergency Generator	ARFF Building Emergency Generator	Diesel	121 hp
16	Emergency Generator	Terminal A Emergency Generator	Diesel	670 hp

Table 4 -- Emission Unit Inventory Subject to Operation Limit

ID	Unit Name	Unit Description	Fuel Type	Rating/Size
17	Starved Air Incinerator	Incinerator Building	Solid Waste	150 lb/hr

Table 5 -- Emission Unit Inventory Subject to Fuel Usage Limit

ID	Unit Name	Unit Description	Fuel Type	Rating/Size
18	Waste Oil Burner	Field Maintenance Building Black Gold Burner	Waste Oil	0.16 MMBtu/hr

Attachment A. ADEC Notification Form

Stationary Source Name

Air Quality ORL Number

Company Name

When did you discover the Excess Emissions/Deviation?

Date: / / Time: :

When did the event/deviation?

Begin: Date: / / Time: : (please use 24hr clock)

End: Date: / / Time: : (please use 24hr clock)

What was the duration of the event/deviation: : (hrs:min) or days

(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

Reason for notification: (please check only 1 box and go to the corresponding section)

- ☐ Excess Emissions - Complete Section 1 and Certify
☐ Deviation from ORL Conditions - Complete Section 2 and Certify
☐ Deviation from COBC, CO, or Settlement Agreement - Complete Section 2 and Certify

Section 1. Excess Emissions

(a) Was the exceedance ☐ Intermittent or ☐ Continuous

(b) Cause of Event (Check one that applies):

- ☐ Start Up/Shut Down ☐ Natural Cause (weather/earthquake/flood)
☐ Control Equipment Failure ☐ Scheduled Maintenance/Equipment Adjustments
☐ Bad fuel/coal/gas ☐ Upset Condition ☐ Other

(c) Description

Describe briefly what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(d) Emission Units Involved:

Identify the emission unit involved in the event, using the same identification number and name as in the ORL. Identify each emission standard potentially exceeded during the event and the exceedance.

Unit ID	Unit Name	ORL Condition Exceeded/Limit/Potential Exceedance

(e) Type of Incident (please check only one):

- ☐ Opacity % ☐ Venting (gas/scf) ☐ Control Equipment Down

- | | | |
|--|--|---|
| <input type="checkbox"/> Fugitive Emissions | <input type="checkbox"/> Emission Limit Exceeded | <input type="checkbox"/> Record Keeping Failure |
| <input type="checkbox"/> Marine Vessel Opacity | <input type="checkbox"/> Failure to monitor/report | <input type="checkbox"/> Flaring |
| <input type="checkbox"/> Other: | | |

(f) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable? ☐ YES ☐ NO
Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐ YES ☐ NO

Certify Report (go to end of form)

Section 2. Deviations

(a) Deviation Type (check one only box, corresponding with the section in the ORL)

- ☐ Emission Unit Specific
☐ General Source Test/Monitoring Requirements
☐ Recordkeeping/Reporting/Compliance Certification
☐ Standard Conditions Not Included in ORL
☐ Generally Applicable Requirements
☐ Reporting/Monitoring for Diesel Engines
☐ Insignificant Emission Unit
☐ Stationary Source Wide
☐ Other Section: (title of section and section number of your ORL)

(b) Emission Unit Involved:

Identify the emission unit involved in the event, using the same identification number and name as in the ORL. List the corresponding ORL condition and the deviation.

Unit ID	Unit Name	ORL Condition /Potential Deviation

(c) Description of Potential Deviation:

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) Corrective Actions:

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____ Title: _____ Date: _____
Signature: _____ Phone Number: _____

To Submit this Report:

Fax to: 907-451-2187;

Email to: airreports@dec.state.ak.us - *if emailed, the report must be certified within the operating report required for the same reporting period;*

Mail to: ADEC, Air Permits Program, 610 University Avenue, Fairbanks, AK 99709-3643;

Phone Notification: 907-451-5173 - *phone notifications require a written follow-up report within the deadline listed in condition 10; OR*

Online Submission: (*Website is not yet available*) - *if submitted online, the report must be certified within the operating report required for the same reporting period.*